

What is claimed is:

1. A file managing system for managing files comprising a means for managing a plurality of files having the same file title but different contents as separate files and a means for managing a plurality of files having the same content as a single file.

2. A file managing system for managing files, comprising:

a file input unit for sending out, to a data processor, inputted files to be registered, file titles to be registered and file IDs to be registered;

a file request input unit for sending out, to the data processor, an inputted file title of a requested file and an inputted pertinent file ID;

a memory unit including a correspondence table, in which correspondence relationships of file titles, file IDs and managing IDs are recorded, and a file memory, in which managing IDs and files are recorded;

a data processor including a means for producing, if no file having the same content as any of the files to be registered has been recorded in the file memory, a new managing ID and recording the new managing ID and a file to be registered in the file memory, a means for retrieving the file memory with managing IDs for obtaining corresponding files, a means for sending out the retrieved file to a file outputting unit, a file content comparing means for comparing the content of a file to be registered

and the contents of files registered in the file memory, a means for registering, if a same content file has been registered in the file memory, the file title of the pertinent file to be registered, the file ID thereof and the managing ID of the same content file in the correspondence table, and a means for retrieving the correspondence table; and

the file output unit sending out, to the file request input unit, the file corresponding to the file title and the file ID requested from the file request input unit as delivered from the data processor.

3. A file managing system for managing files, comprising:

a file input unit for sending out, to a data processor, inputted files to be registered, file titles to be registered and file IDs to be registered;

a file request input unit for sending out, to the data processor, an inputted file title of a requested file and an inputted pertinent file ID;

a memory unit including a correspondence table, in which correspondence relationships of file titles, file IDs and managing IDs are recorded, and a file memory, in which managing IDs and files are recorded;

a data processor including a means for producing a new managing ID and registering, in the file memory, the new managing ID and a file to be registered, a file deleting means for deleting, if a same content file has been

registered in the file memory, the managing ID and the file registered in the file registering means, a means for retrieving the file memory with managing IDs for obtaining corresponding files, a means for sending out the obtained files to a file output unit, a file content comparing means for comparing the content of a file to be registered with the contents of the files registered in the file memory, a correspondence table registering means for registering, in the correspondence table, the file titles to be registered, the file IDs to be registered and the new managing IDs, a correspondence table updating means for updating, if a same content file has been registered in the file memory, the contents registered in the correspondence table registering means with the file titles to be registered, the file IDs to be registered and the managing ID of the same content file, and a means for retrieving the correspondence table; and

the file output unit sending out, to the file request input unit, the file corresponding to the file title and the file ID requested from the file request input unit as delivered from the data processor.

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4. The file managing system according to claim 2 or 3, wherein the memory unit further includes hash tables in which relationships of hash values of files and managing IDs are recorded, the data processor includes a hash table retrieving means for retrieving the hash tables with hash values of files to be registered and a hash table registering

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means for registering, if no same content file has been registered in the file memory, the hash values of files to be registered and corresponding managing IDs in the hash tables, and the file content comparing means compares the content of a file corresponding to a managing ID in the case of obtaining identity as a result of the retrieval in the hash table retrieving means and the content of the pertinent file to be registered.

5. The file managing system according to claim 4, wherein the hash tables are each provided for each file title, and the hash table retrieving means decides, if no same title file as the file title of the any retrieved file has been registered in the file memory, that no hash table retrieval result is present, and retrieves, if a same title file has been registered in the file memory, the hash table corresponding to the file title of the same title file with the hash value of the pertinent file to be registered used as a key value.

6. The file managing system according to claim 4, wherein only a single hash table is provided for all file titles.

7. A file managing method for managing files, wherein a plurality of files having the same file title but different contents are managed as separate files, while also managing a plurality of files having the same content

as a single file.

8. A file managing method for managing files comprising the steps of:

inputting, by a file registering person, files to be registered, the file titles thereof and a file ID;

retrieving hash tables, in which correspondence relationships of hash values of files and managing IDs are recorded, by using the hash values of the files to be registered as key values;

taking out, if a managing ID is obtained as a result of the hash table retrieval, the file corresponding to the obtained managing ID from a file memory and compares the content of the taken-out file and the contents of the files to be registered;

registering, if the content of the taken-out file is the same as the content of a file to be registered, the file title to be registered, the file ID to be registered and the managing ID of the taken-out file in a correspondence table; and

producing, if no identity is obtained as a result of the hash table retrieval or if no same content file is detected although identity is obtained as a result of the hash table retrieval, a new managing ID, registering the new managing ID thus produced and the corresponding file to be registered in the file memory, registering the new managing ID in the hash table with the hash value of the file to be registered used as a key value, and registering

the file title to be registered, the file ID to be registered and the new managing ID in the correspondence table.

9. A file managing method for managing files comprising the steps of:

inputting, by a file registering person, files to be registered, file titles thereof and a file ID;

producing new managing IDs corresponding to the files to be registered and registering the produced managing IDs and the files to be registered in a file memory;

registering file titles to be registered, a file ID to be registered and the new managing IDs in a correspondence table;

retrieving hash tables, in which correspondence relationships of hash values of files and managing IDs are recorded, by using the hash values of the files to be registered as key values;

retrieving, when a managing ID is obtained as a result of the hash table retrieval, the file memory to take out the file corresponding to the obtained managing ID and comparing the content of the taken-out file and the contents of the files to be registered;

updating, if the content of the taken-out file is the same as a file to be registered, the new managing ID registered in the correspondence table to the managing ID corresponding to the taken-out file, and deleting the new managing ID registered in the file memory and the files to be registered from the file memory; and

registering, if no identity is obtained as a result of the hash table retrieval or if no same content file is detected although identify is obtained as a result of the hash table retrieval, the new managing ID in the hash table with the hash values of the files to be registered as key values.

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10. The file managing method according to one of claims 8 and 9, wherein the hash tables are each provided for each file title, in the hash table retrieval each hash table is retrieved for any file having the same file title as a file to be registered, decides, if no same title file has been recorded, that no retrieval result is present, and retrieves, if a same content file has been recorded, the hash table corresponding to the file title of the same title file with the hash value of the file to be registered used as a key value.

11. The file managing method according to claim 8 or 9, wherein the hash table is provided for all of file titles.

12. A file managing method for managing files comprising the steps of:

inputting, by a file requester, the file title of a desired file and the corresponding file ID;

retrieving a correspondence table, in which file titles, file IDs and managing IDs are recorded, with the

inputted file title and file ID;

obtaining, from the correspondence table, the file title corresponding to the inputted file title and file ID and a managing ID corresponding to the inputted file ID;

retrieving a file memory, in which managing IDs and files are recorded, with the obtained managing ID;

obtaining, for the file memory, a file corresponding to the obtained managing ID; and

sending out the obtained file as the desired file to the file requester.

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